CLAIMS

1. A filamentous bacteriophage particle displaying on its surface a binding molecule which has a binding domain able to bind target epitope or antigen, wherein the binding domain of the binding molecule consists of a dAb fragment, the particle containing nucleic acid with a nucleotide sequence encoding the binding molecule.

2. A filamentous bacteriophage particle according to claim 1 wherein the binding molecule is synthetic.

3. A filamentous bacteriophage particle according to claim 2 wherein the nucleotide sequence encoding the binding molecule is provided by combining unrearranged V segments with D and J segments.

4. A filamentous bacteriophage particle according to claim 1 wherein the nucleotide sequence encoding the binding molecule is derived by *in vitro* mutagenesis of an existing antibody coding sequence or pre-existing phage antibodies.

5. A filamentous bacteriophage particle according to claim 1 wherein the nucleotide sequence encoding the binding molecule is derived from a peripheral blood lymphocyte.

6. A filamentous bacteriophage particle according to claim 1 wherein said nucleic acid is comprised in a phagemid genome within the filamentous bacteriophage particle.

7. A filamentous bacteriophage particle according to any one of claims 1 to 6, which is in a population of filamentous bacteriophage particles displaying a population of said binding molecules having a range of binding specificities.

8. A population of filamentous bacteriophage particles according to claim 7 displaying a population of said binding molecules having a range of binding specificities.

9. A method for producing a binding molecule specific for a particular target epitope or antigen, which method comprises the steps of:

producing a population of filamentous bacteriophage particles displaying at their surface a population of binding molecules, wherein each binding molecule in the population of binding molecules has a binding domain and the population of binding molecules has a range of binding specificities, wherein the binding domain of the binding molecules consists of a dAb fragment, and wherein each filamentous bacteriophage particle contains nucleic acid with a nucleotide sequence encoding the binding molecule expressed from the nucleic acid and displayed by the particle at its surface;

selecting for a filamentous bacteriophage particle displaying a binding molecule with a desired specificity by contacting the population of filamentous bacteriophage particles with a target epitope or antigen so that individual binding molecules displayed on filamentous bacteriophage particles with the desired specificity bind to said target epitope or antigen.

10. A method according to claim 9 wherein the binding molecules are synthetic.

11. A method according to claim 10 wherein nucleotide sequences encoding the binding molecules are provided by combining unrearranged V segments with D and J segments.

12. A method according to claim 9 wherein the nucleotide sequences encoding the binding molecules are derived by *in vitro* mutagenesis of an existing antibody coding sequence or pre-existing phage antibodies.

13. A method according to claim 9 wherein the nucleotide sequences encoding the binding molecules are derived from peripheral blood lymphocytes.

14. A method according to claim 9 wherein said nucleic acid is comprised in a phagemid genome within each filamentous bacteriophage particle.

15. A method according to any one of claims 9 to 14 additionally comprising

separating bound filamentous bacteriophage particles from the target epitope or antigen.

16. A method according to claim 15 additionally comprising

recovering separated filamentous bacteriophage particles displaying a binding molecule with the desired specificity.

17. A method according to claim 16 additionally comprising

producing in a recombinant system by expression from nucleic acid derived from said separated particles the binding molecule, or a fragment or derivative thereof with binding specificity for the target epitope or antigen, separate from filamentous bacteriophage particles.